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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/466,025	12/17/1999	PATRICK A. RAYMOND	COMP:0078/FLE	9687

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EXAMINER

HUYNH, KIM T

ART UNIT	PAPER NUMBER
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2189

DATE MAILED: 03/31/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/466,025

Applicant(s)

RAYMOND ET AL.

Examiner

Kim T. Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-9, 12-14, 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Klein (US Patent 6,065,069)

a. As per claims 1, 6, 12, Klein discloses:

- an electromagnetic energy source (fig. 6, 620) located on a first side of a system board proximate an connector (fig.6, 610)
- the electromagnetic energy source ^{Optical Sensor} for generating electromagnetic energy directed at least toward a second opposing side of the system board ; (col.4, lines 39-54), (col.5, claim 12)
- An electromagnetic energy detector (fig.6, 600) located on the second side of the system board the electromagnetic energy detector for detecting a presence of electromagnetic energy when a hot-pluggable component is not mated to the connector and the electromagnetic energy is thereby unobstructed by the hot-

pluggable component, the electromagnetic energy detector further for detecting an absence of electromagnetic energy when the hot-pluggable is mated to the connector and the electromagnetic energy is thereby obstructed by the hot-pluggable component. (col.4, lines 39-54), (col.5, claim 12)

b. As per claims 2, 7, 13, Klein discloses the system further comprising a processor (fig.4, 400) for communicating with the electromagnetic energy detector (fig.2, 220) for receiving the detection of the presence or absence of electromagnetic energy by the electromagnetic energy detector. (col.4, lines 15-21)

c. As per claims 3, 8, 14, Klein discloses the system further comprising a hard drive for storing an indication that the hot-pluggable component is absent when the presence of electromagnetic energy is detected, the hard drive further for storing an indication that the hot-pluggable component is absent when the absence of electromagnetic energy is detected. (col.4, lines 15-28), wherein sensor's (fig.2, 220) output asserted implies indication of component is absent or presence by reading the values of the outputs microcontroller (fig.4, 400) store parameters implies hard drive for storing)

d. As per claims 4, 18, Klein discloses the electromagnetic energy is infra-red energy magnetic energy or ultrasonic energy. (fig.6, 605), wherein optical is implies infra-red energy)

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e. As per claim 5, Klein discloses the connector is one of an edge connector, a cable connector, a fibre channel connector and a USB connector. (fig.2, 210), col.3, lines 5-6)

f. As per claim 9, Klein discloses the connector is an edge connector. (fig.2, 210), col.3, lines 5-6)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 10-11, 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein (US Patent 6,065,069)

a. As per claim 10, Klein discloses

- an electromagnetic energy source (fig. 6, 620) located on a first side of a system board proximate an connector (fig.6, 610)
- the electromagnetic energy source for generating electromagnetic energy directed at least toward a second side of the system board opposing the second electromagnetic energy source; (col.4, lines 39-54), (col.5, claim5)
- An electromagnetic energy detector (fig.6, 600) located on the system board the electromagnetic energy detector for detecting a presence of electromagnetic energy when a hot-pluggable

component is not mated to the connector and the electromagnetic energy is thereby unobstructed by the hot-pluggable component, the electromagnetic energy detector further for detecting an absence of electromagnetic energy when the hot-pluggable is mated to the connector and the electromagnetic energy is thereby obstructed by the hot-pluggable component.(col.4, lines 39-54)

Klein discloses the limitations as discussed as above which show first source and first detector. However, Klein fails to show a 2nd source and a 2nd detector. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the additions of a 2nd source and 2nd detector, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

b. As per claim 11, Klein discloses the connector is an edge connector. (fig.2, 210), col.3, lines 5-6)

c. As per claim 15, Klein discloses locating a material which is impervious to the electromagnetic energy at a position on the hot-pluggable component is mated to the connector. (col.4, lines 51-54), wherein sensor detects, the path is broken implies material is impervious to the connector)

d. As per claim 16, Klein discloses generating the electromagnetic energy comprises the step of generating a beam of electromagnetic energy directed toward the system board. (fig.6, 620, col.4, lines 39-54), (col.5, claim 5), wherein optical reflector 620, generating the optical signal is reflected signal implies to a beam generating energy)

e. As per claim 17, Klein further discloses generating a plurality of independent beams (optical signals) of electromagnetic energy directed toward the system board, (col.4, lines 39-54), (col.5, claim 5)

Klein does not explicitly disclose a source of each plurality of beams (optical) located progressively more distant from the system board.

It would have been an obvious matter of design choice to have a source of each plurality of beams(optical) located progressively more distant from the system board, since applicant has not discloses that having a source of beams(optical) located more distant from the system board to solve any stated problem or is for any particular purpose and it appears having a source of beams (optical) located on the system board not specifically located more distant from system board would perform equally well with.

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Response to Arguments

5. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. *Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (703)305-5384 or via e-mail addressed to [kim.huynh3@uspto.gov]. The examiner can normally be reached on M-F 8:30AM- 6:30PM.*

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703) 305-4815 or via e-mail addressed to [mark.rinehart@uspto.gov]. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-7249 for regular communications and (703)746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-5631.

Kim Huynh

March 23, 2003


RUPAL DHARIA
PRIMARY EXAMINER